

REMARKS

This application has been carefully reviewed in light of the Office Action dated January 5, 2006. Claims 1 to 17 and 37 to 40 are in the application, of which Claims 1, 5, 7, 9, 13, 17, 37 and 38 are independent. Reconsideration and further examination are respectfully requested.

Claims 1 to 11, 13 to 15, 17 and 37 to 40 were rejected under 35 U.S.C. § 102(e) over U.S. Patent No. 6,963,784 (Gibbs), and Claims 12 and 16 were rejected under 35 U.S.C. § 103(a) over Gibbs in view of U.S. Patent No. 6,779,004 (Zintel). Reconsideration and withdrawal of these rejections are respectfully requested.

The present invention generally concerns establishing communications links between devices based on profile compatibility. According to one aspect of the invention, a determination is made whether the profiles of an originating device and a target device are compatible. If not, then a third device is incorporated into the communications by forming a link between the third device and the originating device, and forming a link between the third device and the target device. As a result, if two devices have incompatible profiles, the communication between devices can nonetheless be readily accomplished by incorporating the additional device.

Referring specifically to claim language, independent Claim 1 is a method of automatically establishing a desired communication between an originating device and a target device, the originating device and the target device each having an associated profile, the method comprising the steps of (i) determining a profile compatibility between the originating device and the target device, (ii) establishing the desired communication, if the profile compatibility between the originating device and the target device is not found, between the originating device and the target device by incorporating at least one additional device, the at least one additional device having an associated profile, the incorporation forming linked pairs of devices among the originating device, the target device and the at least one additional device, and (iii) establishing the desired communication, if the profile compatibility between the originating device and the target

device is found, between the originating device and the target device without incorporating the at least one additional device, wherein the incorporation establishes a profile compatibility between each the linked pair of the devices, and each of the steps (i), (ii), and (iii) is performed by at least one of the originating device, the target device, and the at least one additional device.

Independent Claim 38 is an apparatus claim that substantially corresponds to the method of Claim 1.

Independent Claim 5 includes features along the lines of Claim 1, but is more specifically directed to a method of establishing a desired communication between an originating entity and a target entity, each the entity being coupled to a communication network and having a corresponding profile related to information handled by the entity, the method comprising the steps of (i) determining a compatibility between the profile of the originating entity and the profile of the target entity, (ii) if step (i) fails to find a profile compatibility between the originating entity and the target entity, establishing the desired communication between the originating entity and the target entity by interposing at least one additional entity between the originating entity and the target entity to form a chain of entities, each the additional entity having an associated profile, the interposing forming linked pairs between adjacent entities in the chain, and (iii) if step (i) finds the profile compatibility between the originating entity and the target entity, establishing the desired communication between the originating entity and the target entity without interposing the at least one additional entity, wherein the interposing establishes a profile compatibility between each the linked pair, and each of the steps (i), (ii), and (iii) is performed by at least one of the originating entity, the target entity, and the at least one additional entity.

Independent Claim 7 also includes features along the lines of Claims 1 and 5, but is more specifically directed to a method of establishing a desired communication between an originating entity and a target entity, each the entity being coupled to a communication network and having a corresponding profile related to information handled by the entity, the method comprising the steps of (i) determining a compatibility between

the profile of the originating entity and the profile of the target entity, (ii) if step (i) finds a direct profile compatibility between the originating entity and the target entity, establishing the desired communication directly between the originating entity and the target entity; and (iii) if step (i) fails to find the direct profile compatibility between the originating entity and the target entity, (a) specifying one of the originating entity and the target entity as a searching entity, (b) searching the network by the searching entity to identify an additional entity coupled to the network and having a direct profile compatibility with the searching entity to thereby form a linked entity pair providing communications between the searching entity and the additional entity, (c) specifying the additional entity as the searching entity, (d) repeating steps (b) and (c) until the non-specified one of the originating entity and the target entity from step (a) is identified as the additional entity, and (e) establishing the desired communication between the originating entity and the target entity via the linked entity pairs. Each of the steps (i), (ii), and (iii) is performed by at least one of the originating entity, the target entity, and the at least one additional entity.

Independent Claims 17 and 37 are system and computer medium claims, respectively, that substantially correspond to Claim 7.

Independent Claim 9 is also along the lines of the foregoing claims, but is specifically directed to a method of automatically establishing a process between an originating device and a target device, each said device having an associated profile, said method comprising the steps of (i) determining a profile compatibility between said originating device and said target device, (ii) establishing said process, if a profile compatibility between said originating and said target device is not found, between said originating device and said target device, by incorporating at least one additional device, said at least one additional device having an associated profile, said incorporation forming linked pairs of devices among said originating device, said target device and said at least one additional device, said incorporation establishing both a profile compatibility between each linked pair of said devices, and a compatible mapping of a message from said originating device to said target device, and (iii) establishing said process, if said profile

compatibility between said originating device and said target device is found, between said originating device and said target device without incorporating said at least one additional device, wherein said originating device communicates a message, using a message protocol, to said target device; wherein each of the steps (i), (ii), and (iii) is performed by at least one of the originating device, the target device, and the at least one additional device.

Lastly, independent Claim 13 is directed to a method of establishing a process between an originating entity and a target entity, each said entity being coupled to a communication network and having a corresponding profile related to information handled by said entity, said method comprising the steps of (i) determining a compatibility between the profile of said originating entity and the profile of said target entity, (ii) if step (i) finds a direct profile compatibility between said originating entity and said target entity, establishing said process directly between said originating entity and said target entity, wherein said originating entity communicates a message, using a messaging protocol, to said target entity, said process being dependent upon said message, and (iii) if step (i) fails to find said direct profile compatibility between said originating entity and said target entity, (a) specifying one of said originating entity and said target entity as a searching entity, (b) searching said network by said searching entity to identify an additional entity coupled to said network and having a direct profile compatibility with said searching entity to thereby form a linked entity pair providing communications using said messaging protocol between said searching entity and said additional entity, (c) specifying said additional entity as said searching entity, (d) repeating steps (b) and (c) until the non-specified one of said originating entity and said target entity from step (a) is identified as said additional entity, and (e) establishing said process between said originating entity and said target entity via said linked entity pairs to thereby establish said process and a compatible mapping of said message from said originating entity to said target entity. Each of the steps (i), (ii), and (iii) is performed by at least one of the originating entity, the target entity, and the at least one additional entity.

The applied art, alone or in combination, is not seen to disclose or to suggest the features of the present invention. In particular, the applied art, namely Gibbs, is not seen to disclose or to suggest at least the feature of the present invention wherein determining a profile compatibility between an originating device/entity and a target device/entity, establishing the desired communication/process by incorporating at least one additional device/entity and forming linked entity/device pairs if profile compatibility is not found, and establishing the desired communication/process without incorporating an additional device/entity if profile compatibility is found, are performed by at least one of the originating device/entity, the target device/entity, and the at least one additional device/entity.

As understood by Applicants, Gibbs discloses a virtual device control module for interfacing with a target device. A DCM (device control module) is operable for interfacing with the target device, wherein the DCM includes a first FCM (function control module) and a second FCM operable for controlling respective first and second functional components of the target device. (See Gibbs, Abstract and Column 3, lines 11 to 26).

Page 3 of the Office Action asserts that Gibbs (Figure 3) discloses establishing a profile compatibility between each linked pair of devices, wherein the steps (i), (ii), and (iii) are performed by at least one of the originating device, the target device, and the at least one additional device.

However, the cited portion of Gibbs, in particular Figure 3, is simply seen to disclose a single FAV cluster HAVI network. (See Gibbs, Column 4, lines 21 to 23). In this regard, Figure 3 is not seen to disclose or suggest how the network has been set up at all, much less that any communication or process has been established by the devices shown therein.

In this regard, Gibbs is not seen to disclose or suggest how compatibility is determined, and rather is seen to disclose that devices simply require certain configurations. For example, in Gibbs, for a legacy base node to function in the HAVI

architecture, a FAV node must act as a gateway for the legacy base node. (See Gibbs, Column 8, lines 58 to 66). However, Gibbs is not seen to disclose how (or if) any compatibility of these nodes is determined, and simply discloses that certain devices (FAV, BAV, etc.) must relate in a certain manner. Thus, in Gibbs a base AV node device (BAV) may require a full AV node (FAV) to communicate with other devices, but there is no indication in Gibbs of how this relationship is determined, much less that the devices themselves are determining any type of compatibility, or establishing any sort of communication or process based on such a determination.

For example, Figure 12 depicts a process for extending a DCM using a virtual FCM, but Gibbs simply states that a BAV device "is coupled" to the HAVI network, and that a DCM for the device "is downloaded across the network and instantiated within a FAV node". (See Gibbs, Column 19, lines 21 to 30). There is not seen to be any indication of who or what is doing the coupling or initiating the downloading, and accordingly there is not seen to be any indication that any of the devices are doing this themselves.

Accordingly, Gibbs is not seen to disclose or suggest the feature of the present invention wherein determining a profile compatibility between an originating device/entity and a target device/entity, establishing the desired communication/process by incorporating at least one additional device/entity and forming linked entity/device pairs if profile compatibility is not found, and establishing the desired communication/process without incorporating an additional device/entity if profile compatibility is found, are performed by at least one of the originating device/entity, the target device/entity, and the at least one additional device/entity.

Zintel has been reviewed and is not seen to overcome the foregoing deficiencies of Gibbs.

Therefore, the applied art is not seen to disclose or to suggest at least the feature of the present invention wherein determining a profile compatibility between an originating device/entity and a target device/entity, establishing the desired

communication/process by incorporating at least one additional device/entity and forming linked entity/device pairs if profile compatibility is not found, and establishing the desired communication/process without incorporating an additional device/entity if profile compatibility is found, are performed by at least one of the originating device/entity, the target device/entity, and the at least one additional device/entity.

Accordingly, Claims 1, 5, 7, 9, 13, 17, 37 and 38 are believed to be allowable over the applied references.

The other claims in the application are each dependent from the independent claims discussed above and are therefore believed to be allowable over the applied references for at least the same reasons. Because each dependent claim is deemed to define an additional aspect of the invention, however, the individual consideration of each on its own merits is respectfully requested.

No other matters having been raised, the entire application is believed to be in condition for allowance, and such action is respectfully requested at the Examiner's earliest convenience.

Applicants' undersigned attorney may be reached in our Costa Mesa, California office by telephone at (714) 540-8700. All correspondence should continue to be directed to our address given below.

Respectfully submitted,



Attorney for Applicants  
Edward A. Kmett  
Registration No. 42,746

FITZPATRICK, CELLA, HARPER & SCINTO  
30 Rockefeller Plaza  
New York, New York 10112-3801  
Facsimile: (212) 218-2200

CA\_MAIN 111850v1